THE WORLD'S BEST-SELLING DIGITAL PHOTO MAGAZINE

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Photography week

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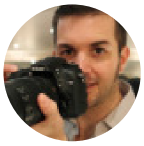

Welcome to the world's No.1 weekly digital photography magazine. If you're already a reader, thanks for your continued support and involvement; if you're new to *Photography Week*, you've come to the right place! In addition to expert advice, brilliant tips and step-by-step tutorials, every issue features interactive galleries of brilliant photos, how-to videos on essential shooting and editing techniques, and in-depth reviews of the latest camera kit.

But that's not the whole story. *Photography Week* is more than a magazine – it's a community of like-minded people who are passionate about photography. To get involved, just follow any of the links below and share your shots and comments.

Jeff Meyer, Editor

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We're more than just a magazine – read on and discover the many ways you can interact with and enjoy *Photography Week*

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Cover image © Getty

THE DJI MINI 4 PRO MARRIES POWER WITH SIMPLICITY

New lightweight drone arrives with upgrades to make flying easier than ever

© DJI

DJI has announced the Mini 4 Pro, an update of its top-of-the-line Mini 3 Pro ultralight that crams omnidirectional collision sensors, 20km 'O4' radio range, and ActiveTrack 360 subject-tracking AI into a drone which still comes in under the all-important 250g threshold.

The Mini 4 Pro is designed to be easy enough to fly to appeal to novices, while offering enough features to keep more seasoned aerial photographers happy, There's not a lot that's new here compared to the Mini 3 Pro, with most of the improvements affecting the flying experience rather than the photograhy. Most of the features that are new are inherited from DJI Air 3.

Leading the way among the flight-oriented upgrades is best-in-class omnidirectional object sensing, which adds object detection on both sides of the drone to the tri-directional (front, behind and above) sensing on the Mini 3 Pro. How much use this will be depends on how far you like to push the envelope when flying your drone, but it's certainly good to have.

Other new flight features include waypoints, which enable you to plot preset flight and camera operations, and 360-degree Automatic Tracking, which enables pilots to perform camera movements such as circling, and pulling in or away using the remote controller's trace wheel interface.

The Mini 4 Pro's maximum range has been extended thanks to DJI's latest OcuSync 4.0 technology, which first appeared in the DJI Air 3. The 'O4' Full HD 60fps video transmission range is almost double that of the previous-gen tech, at up to 20km, although in most regions you need to keep your drone within your line of sight, so this is another feature that may not see a great deal of use outside professional environments.

The Mini 4 Pro has the same camera setup as the Mini 3 Pro, with a single 24mm f/1.7 camerawith a 1/1.3in sensor for photos up to 48MP, plus 4K video. Slow motion video recording in 4K has been increased from 60fps to 100fps, and now we get the D-Log M color profile rather than just D-Cinelike, which makes it easier to colour-match footage with video from higher-end DJI drones.

The DJI Mini 4 Pro is available to buy now in three kits: the DJI Mini 4 Pro (DJI RC-N2) kit for £689 / $759, the DJI Mini 4 Pro (DJI RC2) kit for £869 / $959, and the DJI Mini 4 Pro Fly More Combo (DJI RC 2) for £979 / $1,099. The usual add-on accessories are available, including the Flight battery (£56 / $65) and ND filter set (£45 / $55).

THE NIKON PLENA COULD BE THE ULTIMATE PORTRAIT LENS

Nikon has announced the Nikkor Z 135mm f/1.8 S Plena, its second named Z-mount lens following the Nikkor Z 58mm f/0.95 Noct. The new lens arrives bearing the promise of unparalleled image quality, including outstanding bokeh and corner-to-corner sharpness.

The Nikon Plena is actually the company's long-awaited 135mm portrait lens for the Z mount – but what does that name mean? According to Nikon, 'Plena' is derived from the Latin word 'plenum', which, it explains "denotes the state of a space being completely full".

It adds that the name was chosen "to reflect the lens' ability to support the user's creative vision with beautiful, well-rounded bokeh of outstanding sharpness and clarity".

The lens's wide maximum aperture, coupled with its 11 aperture blades should render almost perfectly round bokeh, even towards the edges of the frame, and in Nikon's promotional images the quality of the bokeh certainly looks very impressive.

Nikon has also made the bold claim that the lens will show its full sharpness all the way down to f/1.8, with the

© Nikon

Plena having a minimum aperture of f/16. The manufacturer also promises that the Plena will show absolutely no vignetting, even fully open.

To achieve all this, the lens is constructed of 14 groups made up of 16 elements, including ED aspherical and extra-low dispersion elements, which should reduce aberrations, sagittal coma, and flare. And for that perfect bokeh, the lens apparently produces no onion-ring effect.

In terms of build, the Nikon Plena has two custom function buttons on its body and an 82mm filter thread. It's a pretty substantial piece of glass, weighing in at a whopping 995g and measuring 139.5 x 98mm (5.49 x 3.86 inches). While this is a lens that will be most commonly used in the studio, out in the field this will certainly be a notable weight to carry around for long periods, although the lens is fully weather sealed and comes with a lens hood and case.

The Nikon Z 135mm f/1.8 S Plena is available now, priced at £2,699 / $2,499.

TRICKY LIGHTING
The raw file format offers peace of mind in challenging conditions, as it's far more forgiving of minor exposure errors and allows for plenty of detail retention

© Weerasak Saeku/Moment via Getty Images

HARNESS THE POWER OF RAW

For better image quality and creative control, get more from your raws

Words by: Peter Fenech

Among the first things digital photographers learn when moving up from beginner to enthusiast level is that pro photographers generally shoot raw files. While this is a little reductive – JPEGs are still useful in a professional capacity – it's generally accepted that the raw file format is superior to JPEG in terms of its flexibility and creative potential. This is due to multiple factors, both at the moment of exposure and after your photoshoot, in the digital darkroom.

With the camera in raw capture mode, once the sensor has been exposed to light and the shutter curtain has closed again, photo information is handled differently. The camera's onboard computers read the charge created by light striking the photo-sensitive materials and pass it through a chain of processing. There's usually some degree of charge amplification and interpolation to ensure life-like colour reproduction, but eventually, it's time for the image to be saved to the camera's memory card, or your computer's hard drive, if you're shooting tethered.

When shooting JPEGs, some compression is applied to the image data at this stage, to reduce the file size and save storage space. In digital photography 'compression' means data loss, since a portion of the information is removed from the file before writing. Raw files are spared this step, meaning the recorded image file is larget, and contains more colour and detail to work with.

To get the best out of raw files, we must know how best to expose the images and how to treat them in software. So, let's explore this versatile file format.

FEATURE

CAPTURE PERFECT RAW FILES

Adjust your camera work to capture better-quality raw images

© Twenty47studio/Moment via Getty Images

IN-CAMERA SUCCESS
While the main benefit of raw is its editing flexibility, you still need a good-quality image to work with

One of the interesting aspects of professional photography is how we tend to fall into a pattern of camera work that's repeated every time we go out to shoot. Since experience consigns many tasks to muscle memory, this can increase the consistency of your image quality and make your shoots more efficient.

However, on occasion, you may have found yourself cutting a few corners in this process to speed up your image turnover. Or perhaps you've become so involved in the subject you're shooting that you forgot to follow your established camera 'workflow'. It's useful, therefore, to occasionally check that you're still shooting in a way that will enable you to capture the best possible images your kit is capable of producing.

Many photographers are aware of techniques such as exposing to the right (ETTR), which is an excellent method of maximising the quality of your raw files. ETTR pushes the exposure to levels at which modern sensors are able to capture an optimal level of colour and detail information, while tipping the signal-to-noise ratio in our favour. However, the ETTR method is often not performed to its full potential, because of a little-known quirk of most digital cameras – when you preview your images, it turns out that your camera is often misleading you.

All the professional techniques we learn to improve detail capture, such as ETTR, metering for the highlights and using the histogram, are based on adjusting the exposure until the preview image contains as much detail as possible before the highlights are blown. The problem is that the preview image shown on your camera's rear LCD screen is not the true raw image; rather, it's a JPEG preview.

You might think that this is irrelevant, since you base your exposure on the histogram not the preview image. However, the histogram is also a readout of the JPEG data, not the raw data. Therefore, when you reference the histogram and see that it's touching the right wall, which would seemingly indicate a loss of highlight detail, this might not necessarily be the case.

THE DEAL WITH DRO

Dynamic Range Optimisation (DRO) is a camera feature that extends the visible range of detail in an image, out of the camera. Just like a JPEG picture style, however, the mode doesn't apply any effect to raw files, since processing is required – the camera merely underexposes and lifts the shadows. However, some photographers feel that by engaging DRO, their camera seems more in tune with their exposure management workflow, when trying to hold the highlights. This may be due to the metering system biasing towards preventing highlight clipping, while capturing as much shadow as possible, almost like ETTR. Try this to see if your camera model reacts differently to high contrast with DRO mode active.

For this reason, to capture the maximum possible data in your raw images it's useful to learn exactly when your particular camera make and model starts to clip detail. Armed with this information, you'll be able to accurately tailor your exposures in any lighting.

CAPTURE PERFECT RAW FILES CONTINUED

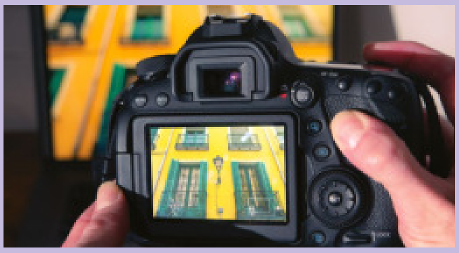
BRIGHTER BIAS
Shooting brighter images means you can capture more detail with reduced noise

© Peter Fenech

EXPOSE LIKE A PRO Shoot to capture the greatest range of detail and colour, and the least noise

1 SET A FLAT PROFILE

In-camera profiles aren't applied to raw images, but set a flat camera style to create a low-contrast preview image. Apparent clipping will occur less often, making the preview closer to the true appearance of the raw file.



2 TEST IN CONTROLLED CONDITIONS

When using your LCD in the field, ensure that brightness remains constant, and that you have a standard reference for brightness assessment. Compare the LCD against your laptop under a standard lighting setup.

3 SET EXTENDED LOW ISO

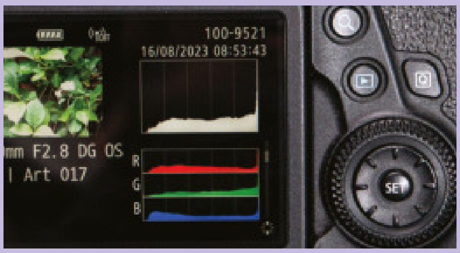
At ISO64 or 50 ('extended' L1 settings), the camera selects the minimum ISO and overexposes for an equivalent brightness. This can cause highlight clipping but minimal noise. Account for this if pushing exposure further.

4 PUSH THE 'BLINKIES'

Increase exposure until just before highlight alerts show. Take a shot, push the exposure until clipping shows on-screen, and take another image. This maximises the signal capture, compensating for histogram inaccuracies.

5 SHOOT 1EV BELOW

To allow for any unexpected LCD brightness shifts, capture a file 1EV below this 'overexposed' file. This allows you to access detail lost through clipping, but saves card space compared with auto exposure bracketing.



6 CHECK RGB HISTOGRAMS

The luminance histogram is even more inaccurate, as it doesn't convey channel information. Always refer to the red, green and blue graphs to get a better view of the potential clipping of individual channels.

ONE FILE, MANY POSSIBILITIES

Bolster your portfolio with multiple image variants from one single exposure

RAPID RE-WORK
When shooting events such as weddings, raw files allow multiple, vastly different image styles to be created on demand for client requests

© Catherine Delahaye/ DigitalVision via Getty Images

After making raw our format of choice, we soon notice that the images out of the camera are far from print-ready. If you're going to shoot raw files, some degree of post-processing is required to make shots ready for display – one of the main reasons for using the format in the first place. However, the real power of raw becomes clear once you start to get creative with your editing style.

While basic sharpening and colour adjustments may be all you need for some images, this won't allow you to get the full use out of your raw processing software. The biggest advantage of the raw workflow is that you can apply, revisit, change and resave versions of images at any time, even years after originally adding photos to your database.

A useful feature in many raw applications, such as Adobe Lightroom, is 'virtual copies'. Although the exact terminology may differ depending on the software brand, the functionality is mostly universal. With this option, it's possible to save multiple variants of any image within your Catalog, often grouped together for convenience.

You can make minor adjustments to your edit settings, for small differences in print media characteristics, for example, or create completely opposing styles of the same base shot. As all of this is non-destructive, your original file remains unchanged, meaning that you will always have another version to fall back on should your editing intentions evolve.

When generating many versions of your raw images, remember that unless you save a JPEG or TIFF of each variant, you'll lose your edits if your computer's hard drive fails. An easily overlooked backup step is to make a copy of your raw software catalogue on a separate drive. Keep all your raw files and processed images together in one folder to make any image easily searchable later.

RAW + JPEG

Is there any benefit to shooting both file formats?

Some photographers shoot raw and JPEG simultaneously, but other than filling up space on the memory card, is there any point in this? If you need to show your images to clients quickly, or as a handy reference when previewing your catalogue, JPEGs are useful. However, if you're committed to the raw workflow, there's no real advantage to having a JPEG alongside the raw. If you want both, save each format to different cards to keep them separate at the image rating stage.

ONE FILE, MANY POSSIBILITIES CONTINUED

ENJOY MULTIPLE IMAGE OPTIONS Use raw processing to create variations of your images

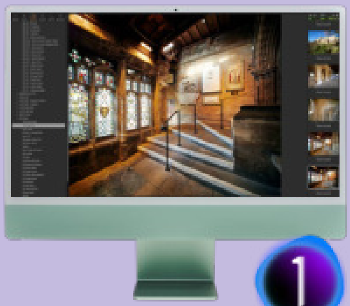
1 HIGH-CONTRAST COLOUR
By increasing global contrast and single-channel saturation, images appear to jump off the page. These adjustments are best for landscape or portrait images destined for glossy paper.

2 VINTAGE MONOCHROME
A matte effect was added by lifting the bottom of the Tone Curve to 'mist' the Blacks. Noise and a strong vignette were added in the Detail and Effects panels.

3 PASTEL COLOURS
For this variation, Split Toning and Colour Grading were used to differentially colour the shadows, midtones, and highlights, creating an expired film look. HSL allows bespoke adjustments in each colour channel.

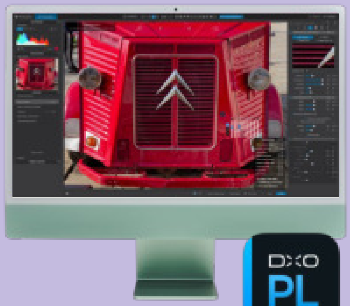
4 PUNCHY BLACK AND WHITE
A strong S-curve in the Tone Curve panel, increased Clarity, and some dodging and burning with the Adjustment Brush create a contrast-heavy monochrome style. This was enhanced with a Gradient Map in Photoshop.

TOP RAW EDITORS Take your pick of the best raw editing options available today



CAPTURE ONE
Capture One is a powerful raw editor with plenty of advanced features. We've found that it offers superior results to Adobe Lightroom, but the workspace isn't the most intuitive. It's great for tethered work.

ADOBE CAMERA RAW
The best thing about Camera Raw is that it's free with Photoshop. While it might not look like the most advanced editor, it has all the tools you need for global and local adjustments in a user-friendly layout.



DXO PHOTOLAB
Perfect for advanced lens corrections and general non-destructive processing. The DeepPRIME engine makes noise reduction easier, and it's a good option if you'd rather pay a one-off fee than a subscription.

FEATURE

GRADE TO THE EXTREME

Push colour grading to achieve cinematic images without loss of quality

© Peter Fenech

JPEG files are often described as being 'fully baked', in that the data held within them is of a fixed state. The final colour theme and exposure have been decided on, and those parameters are locked in, and can't be easily adjusted without degrading the image quality. That's why, when shooting in JPEG format, the white balance should be adjusted in-camera to ensure it's correct before the finalising process takes place.

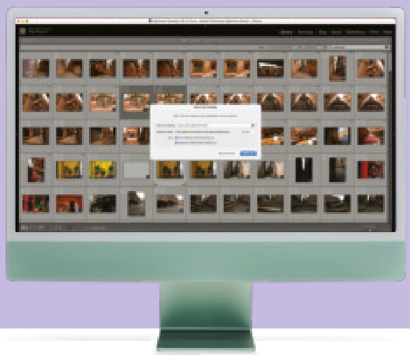
One of the big benefits of the raw format is the ability to choose a white balance preset, or select any kelvin value, after shooting has taken place. This means we can choose a global colour theme at any point in our workflow, including any adjustments further local edits may necessitate.

However, the power of raw for colour editing goes beyond global work. It offers an opportunity to define a colour gradient based on tonality, something that isn't possible with an overall white balance preset. This technique, known as colour grading in the post-DSLR video world, allows custom colour targeting to each of the shadows, midtones and highlights in isolation. The image can be managed to replicate the look of film stock, or to create a custom range of colour. The flexibility of the raw format allows us to make extreme adjustments to the colour balance as shot.

FUTURE-PROOF YOUR ARCHIVE

Keep your edit work safe to take advantage of your raw files in future

Another advantage of raw is the ability to revisit any file and re-edit it, but don't forget to back up the edited files. Since many shots in your raw Catalog in Lightroom won't have been saved in a printable format, such as TIFF or JPEG, you're at risk of losing the edits. Regularly back up your Catalog file to a separate location, and to create new edit options, use virtual copies to store variations together. Finally, if you like an editing style, create a preset so that you can apply it to other shots in future.



GRADE TO THE EXTREME CONTINUED

COMPLEXIFY COLOURS Use your raw processing software to create colour depth

1 SET BLACK AND WHITE POINTS

Start by setting the global contrast limits using the Blacks and Whites sliders. Hold down Option (or Alt on a PC) and drag the sliders until just before the mask shows clipping has occurred. This introduces greater depth without losing detail.

2 ADJUST TONE CURVE

Switch to the RGB curves, and adjust each one to target colours to different tonal ranges. This is a great first step, as you can adjust contrast from the same window, allowing hands-on control over global image styling. Drag up to add colour and down to reduce it.

3 USE SATURATION SLIDERS

In the HSL tab in your editing software, adjust the saturation of each of the colours individually. This allows you to create further separation of image elements, creating local contrast in a subtle way. Try inverting your settings on a virtual copy to experiment.

4 CUSTOMISE HUE

Change the look of each of the colours in your shot with the Hue control. This is an extremely powerful tool when you're working on shots that contain many different colours, as it enables us to further separate our subject and craft unique contrast.

5 CALIBRATE COLOURS

Tools such as the Calibrate tab in Lightroom allow the user to directly alter the colour science of the shot. This is ideal for colour-matching images from different camera brands, but also for creating fully bespoke colour palettes that aren't available from JPEG files.

6 APPLY COLOUR LUTS

Although not all raw editors support direct Lookup Tables, it's often possible to create these from raw settings presets and import them. LUTs allow the quick application of different colour sets; just be sure to adjust the intensity to match your current image.

FEATURE

EXTRACT MAXIMUM DETAIL

Use the raw format's flexibility to capture a huge range of natural textures

© Claire Gillo

DELICATE DETAILS
Raw imaging is useful for any genre of photography. In macro and nature shots, for example, the greater colour control allows fine extraction of detail in single channels

Although shooting raw gives you maximum scope for detail extraction, it's important to understand how to get the most from your camera's sensor. The issue with digital photography is that there are many 'invisible' steps in the image creation process, and many of these steps are out of your control. The image that gets saved to your memory card is, in many ways, a collaborative effort between you and the programmers at the camera manufacturer.

As with many examples of progress, improvements in digital imaging have come about as a result of automation. The benefits of mirrorless technology and lens design are often born from an increase in automatic corrections, which often can't be deactivated, and this can result in the photographer feeling left out of the equation.

While it may not be possible to intervene in such processes, being aware of what your camera and lens are doing at each stage of the shooting process will help to ensure that they don't work against you. Let's explore how we can take maximum control over the look of our raw files, from the point of shooting them in the field to adjusting the tones in raw editing software.

HEIF FILES

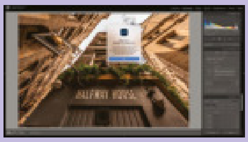
A relatively new player in the file format game, the High-Efficiency Image File format offers greater image quality than JPEG, with a smaller file size, due to more effective compression. Because it's a container format, other image data can be stored within files, allowing some non-destructive editing potential. However, the format isn't as versatile as raw, and there are compatibility issues with many mainstream editing applications.

THE SRAW ADVANTAGE

Most cameras can shoot lower-resolution sRAW files. These save space while providing raw flexibility. It's not often best to 'waste' pixels, but even the smallest options today are big enough for print, so this feature is great for saving space and hastening file transfer when on the move.

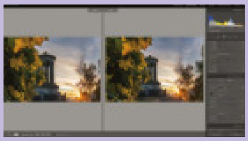
SECRET STEPS TO BETTER IMAGES

Pro tricks for improved detail

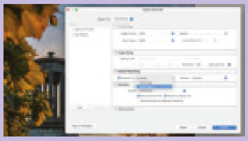


USE THE 'WRONG' LENS PROFILE
Lens profiles are a quick way to iron out distortions, but sometimes one created for a similar model produces better results. Try lenses with a similar focal length from the list of presets to see which results you prefer.

APPLY JPEG PROFILES
Although picture styles aren't applied to raw files, you can set up proprietary raw software to load presets on import. This means that you'll get similar results to what you saw on your camera LCD in the field.



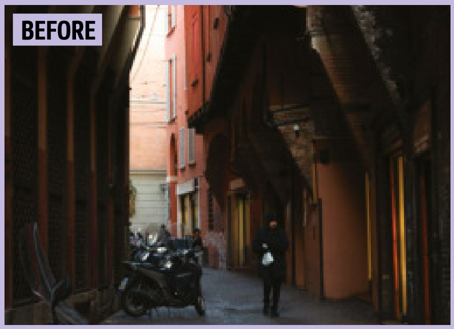
WIDEN YOUR FIELD OF VIEW
You can squeeze more edge detail from your images by turning off automatic lens corrections, where possible. It may reveal vignetting or distortion, but custom adjustments might suit your image better.



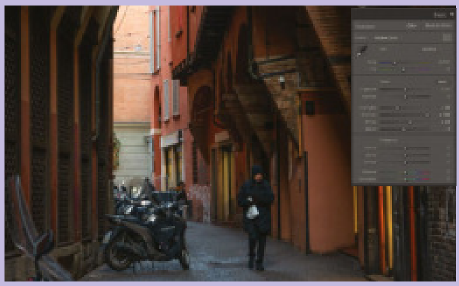
SHARPEN TWICE
For superior detail, sharpen an image in the Detail panel of your raw editor, and then again on output, based on media destination. This tailors detail extraction for the paper or screen type your images will be viewed on.

EXTRACT MAXIMUM DETAIL CONTINUED

SINGLE RAW HDR Make full use of the image data stored within your correctly exposed raw files



LIGHT FANTASTIC
Moving elements in this scene made multi-shot HDR hard, but by exposing for the highlights in raw an HDR effect can be created with a single file

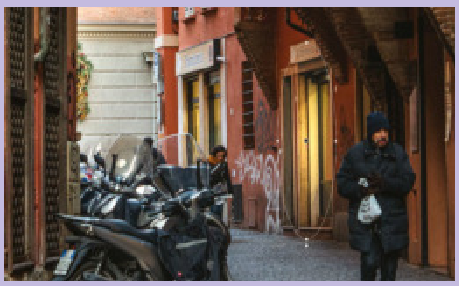


1 COMPRESS RANGE
Pull back the highlights and lift the shadows using the corresponding sliders. This creates a good base on which to apply further adjustments. We're working in Lightroom, but most raw editors work in a similar way.

2 REINTRODUCE CONTRAST
The compression of the range can leave the global contrast looking a little flat. Use the Curves control to add a subtle S-curve, to create a more natural look. The beauty of non-destructive editing is that it can be adjusted later.

3 ADJUST DETAILS
Here, we increased Clarity to generate some structure, and used the Texture slider to bring out patterns in the cobbled street and textured buildings. We also used some negative Dehaze to add weight to the shadows.

4 LINEAR GRADIENT
The scene was illuminated from behind, so to increase the brightness on the left, a Linear Gradient was drawn across it. This lifted that area of the shot, while maintaining the dark-to-light transition moving away from the camera.



5 RADIAL GRADIENTS
The Radial Gradient option produces realistic effects around light sources. We darkened the highlight 'hotspot' on the far building, and added more to brighten the light spilling from the cafes, making the scene glow.

6 CREATE LUMINANCE MAP
We added another mask and chose Luminance Range. We selected a shadow area that wasn't truly black, and used this to target detail lifting and noise reduction in darker areas. We added subtle negative Temperature for colour depth too.

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GALLERY

XPOSURE

THE WEEK'S MOST INSPIRING READER PHOTOS

BEACON

ROSS FARNHAM

"This is the much-photographed South Stack Lighthouse in Anglesey, north Wales. I took this during a photography week in Wales with two friends."

http://bit.ly/3oxd80j

GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS

NHINDUSTRIES NH90

CHRIS FITCH

"This is a photo of an NHIndustries NH90 helicopter, taken at last year's Royal International Air Tattoo at RAF Fairford in Gloucestershire, UK."

https://bit.ly/39tBxPc

HOPPER

BRUCE ROBERTSON

"I took this photo for my daily 365 challenge –I was walking into the garden when I spotted this little chap climbing up the garage door."

http://bit.ly/3TLgvAm

FOGGY SENTINEL

SHAYNE KAYE

"On a foggy morning walk at a lake in Victoria, Canada, my wife and I came around the corner of the floating bridge and froze as we saw the faint silhouette of a great blue heron guarding it. I quickly switched to a wider lens so that I could capture this 'sentinel' and its territory."
https://bit.ly/3Poyjja

FACEBOOK
http://bit.ly/39py9lg

FLICKR
http://bit.ly/2VIgsJ0

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I N S P I R A T I O N

IT'S COOL, THAT

THE BEST THING WE'VE SEEN THIS WEEK

Images © The photographer and courtesy Astronomy Photographer of the Year

Above: *Andromeda, Unexpected* by Marcel Drechsler, Xavier Strottner and Yann Sainty, Overall winner. Right, top: *New Class of Galactic Nebulae Around the Star YY Hya* by Marcel Drechsler, Winner, Stars and Nebulae. Right: *Zeila* by Vikas Chander, Winner, People and Space

ANDROMEDA REVELATION IS TOP ASTRO IMAGE OF 2023

Astronomy Photographer of the Year reveals spectacular winning images

The UK's Royal Observatory has announced the winning images in this year's Astronomy Photographer of the Year contest, the world's largest Astrophotography competition.

A trio of amateur stargazers – Marcel Drechsler, Xavier Strottner and Yann Sainty – shared the top prize for their breathtaking photo titled *Andromeda, Unexpected*. The image captured for the first time a colossal plasma arc – the curved blue cloud in the image above – adjacent to the Andromeda Galaxy (M31). The discovery has sparked huge excitement in the global astronomy community, as it may be the largest structure of its kind near our Milky Way.

Images from the competition are on show now in an exhibition at the National Maritime Museum in Greenwich, London. Click the link to see more images at the competition website, where you can also sign up to receive astrophotography tips and news.

SEE MORE IMAGES
https://bit.ly/3t5OoTf

ADD THE HUMAN FACTOR

Mike Harris shows you how to use a model to add human interest to a landscape that has no obvious subject

1 HOUR

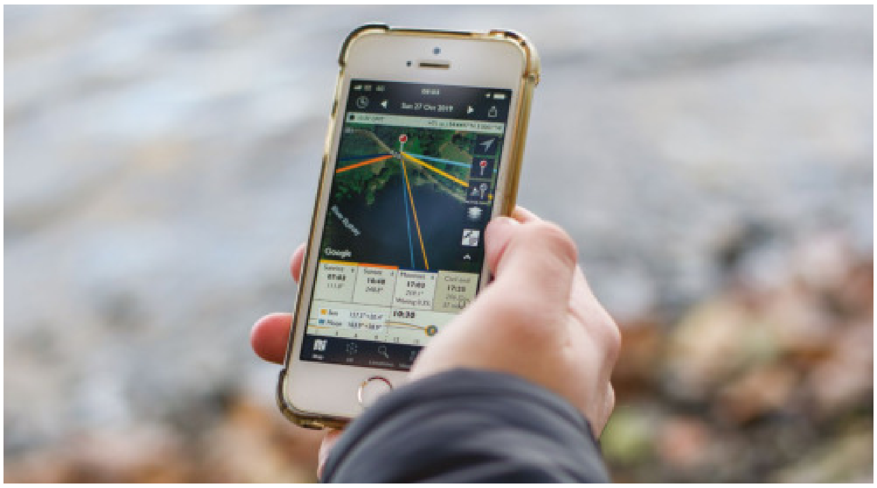
Including a figure in a landscape is a fantastic way to introduce human interest to an otherwise empty scene while retaining control over your composition. Social media is teeming with figure-in-a-landscape photos, and we're going to show you just how effective this technique can be.

We shot our sunrise image in the UK's Lake District. With no obvious focal point, and with the lake and sky dominating the frame, it's not the most interesting landscape; but with our model positioned on a partially submerged rock we were able to add a whole new element that engages the viewer and suggests a story.

As with any landscape shoot, planning is crucial. The Photographer's Ephemeris app told us when and where the sun would rise, and allowed us to keep tabs on its position throughout the shoot. A 35mm focal length allowed the figure to feature prominently while also allowing us to fit in plenty of the surrounding scenery. If you're not using a model you can capture yourself, using your camera's self-timer.

We made sure our model knew what we were trying to achieve before she got into position. We then discussed the variety of poses she would cycle through, which allowed us to try multiple setups. Our final shot features a bird, which flew into the frame at the perfect moment; be sure to take plenty of shots to increase your chances of capturing something unexpected.

HOW TO POSE A SUBJECT IN A LANDSCAPE



1

LOCATION, LOCATION, LOCATION

Decide where you want to position your figure. We used The Photographer's Ephemeris app to work out where the light would be coming from, and chose to shoot with the light behind us. This meant the light was hitting the trees and clouds in the background.

2

DRESS TO IMPRESS

Think about what your model is wearing. It can be difficult to see the details on dark clothing, and if you're not careful your figure can get lost in the expansive background. The white dress in our example contrasts against the dark clouds, and plenty of detail is visible despite the moody conditions.

3

CAMERA SETTINGS

We froze any movement caused by the wind by using a shutter speed of 1/160 sec. The bright weather allowed us to shoot at ISO100, and an aperture of f/2 helped us blur the extreme foreground and produce a shallow enough depth of field to make the figure pop against the busy background.

QUICK TIP

Photographers often talk about taking one good shot, but light moves quickly, especially at sunrise and sunset. We'd recommend taking plenty of shots so that you can select the best lighting in post-production.

HOW TO POSE A SUBJECT IN A LANDSCAPE

4

GET LOW

With little height in our scene, we had to get down low to frame a pleasing composition. Shooting from a low angle also makes your figure look more powerful. Our camera's tilting screen was very handy here, and we engaged the level overlay to ensure that we captured a level horizon.

5

FOCUS POINT

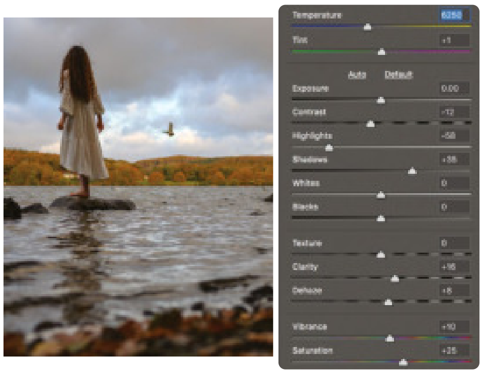
Set your Focus mode to Single-servo (AF-S) and your AF-Area mode to Single-point. Use the joystick or touchscreen to move the focus point over your figure, or half-press the shutter button and recompose. The latter can also be done in Continuous-servo (AF-C) mode if you're using back-button focusing. Back-button focus will also enable you to shoot burst sequences without any fear of the camera refocusing or hunting.

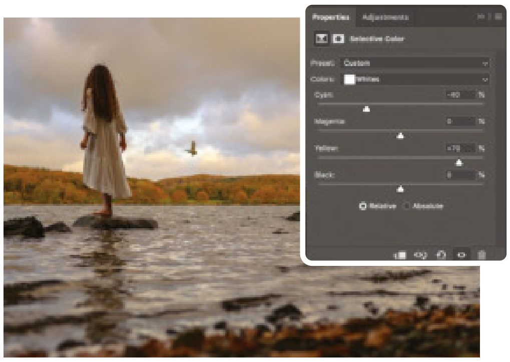
6

DIRECT YOUR MODEL

Windy weather can make it difficult to communicate with your model once they're in place. Talk them through your vision, and discuss a variety of poses that you'd like them to cycle through beforehand. This enables you to take plenty of shots in quick succession, and experiment while doing so.

KEY EDITING TIPS





1 ROUGH EDIT IN CAMERA RAW

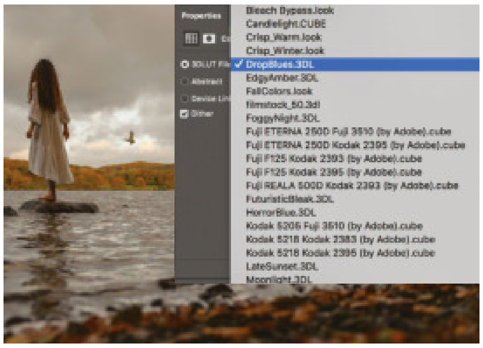
Begin with a rough edit in Adobe Camera Raw. We lifted the Shadows and then decreased the Highlights significantly for a more dramatic sky. A little Dehaze boosted the trees in the background, and Vibrance and Saturation enhanced the colours. Finally, a bit of Clarity was used to add punch to the image.

2 REMOVE DETRACTING DETAILS

We opened our image in Adobe Photoshop CC and removed anything that detracted from the scene: branches in the top-right of the frame, buoys, and buildings on the shoreline. Use the Patch Tool to draw around an item to select it. Click the selection, and drag your cursor to the area you want to use as the patch.

3 GOLDEN LIGHT

We wanted to increase the warmth of the image, so we added a Selective Colour adjustment layer and selected Whites. We decreased the Cyan value (we settled on -40) and increased the Yellow slider (+70 worked for us) to add a golden hue to the white clouds. You can reduce the intensity of the effect if needed by decreasing the layer's opacity.



4 ADJUST COLOUR WITH LUTS

You can make further colour adjustments with colour lookup tables (LUTs). Open a Color Lookup adjustment layer and click the Load 3D LUT dropdown box. For our image we used LateSunset, EdgyAmber and DropBlues, which we controlled with the opacity slider and layer masks, using a white brush to remove unwanted parts of the mask.

5 MAKE YOUR FIGURE POP

To make your figure stand out a little more against the background, open a Curves adjustment layer and nudge the highlights. Just focus on how the Curves tool is affecting your figure – don't worry about blowing out highlights elsewhere as we'll deal with this later. Again you can control the intensity of the layer by altering the opacity.

6 ADJUST WITH A BRUSH

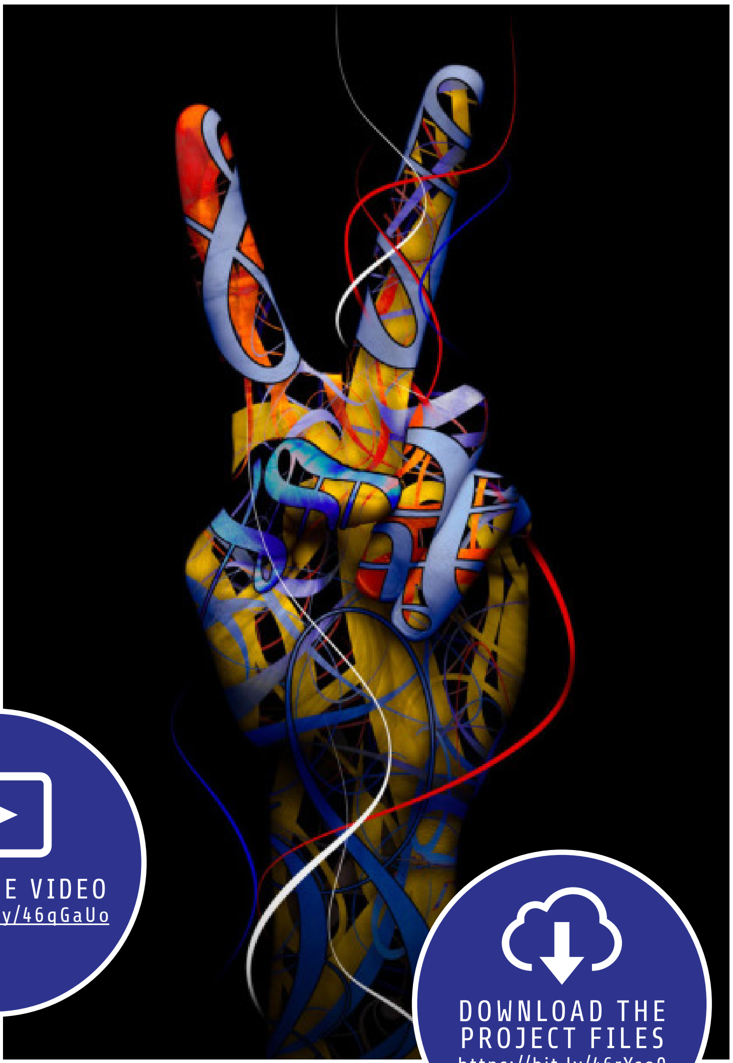
Hold Cmd/Ctrl+I to invert the adjustment layer's mask (this will hide the Curves layer). Now select a soft white brush. Anywhere you paint will reveal the hidden Curves layer, allowing you to apply the adjustment selectively by brushing over your figure. Hit '\' to reveal a red overlay for a better visualisation of your layer mask.

EXPERT TIP

If you want to subtly increase the contrast in the clouds for an even more dramatic sky, you can do so with a little manual brushwork. Use a layer for your white brush and another for your black brush, and set each layer's opacity to around 4%. With a soft brush, paint the very darkest parts of the clouds black and the very lightest parts of the clouds white. Once you're done you can further adjust the opacity of the layers accordingly. Even a layer at just 1% or 2% opacity can make a surprising difference to your image.

PHOTOSHOP CC

LEARN ESSENTIAL EDITING SKILLS FAST!



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ON A PC OR MAC

HOW TO...

GET CREATIVE WITH CLIPPING

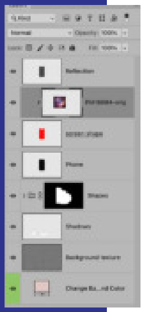
James Paterson shows you how to use clipping masks to craft a dynamic digital effect

You can do all sorts of clever tricks with layers in Photoshop, using tools such as blending modes and filters, but one less well-known technique is clipping masks. Perhaps this is because these are seen primarily as a tool for designers; however, but this powerful feature can be equally useful for photographers. Whether you want to create eye-catching conceptual art like ours, or more simple layouts and photo frames, clipping masks can be incredibly useful, as you'll discover in this issue's video tutorial.

Essentially, a clipping mask requires two things: a shape, and something to fill the shape with. For our shapes here we've used a series of simple flourish designs. (You'll find a layered PSD file among the project files, with an choice of flourishes.) We simply copy our hand image on top of a flourish layer, then 'clip' the hand to the flourish so that only the parts directly above the hand shape are visible. From here, we can repeat the process to build up the effect while adding depth with colour changes, shadows and strokes.

EXPERT TIP

Clipping masks are great for creative effects, but also for simpler tasks like filling a phone screen with an image. (We used a free Photoshop template here: go to File > New, click the Mobile tab and download an image.) Select the phone screen area, make a new layer, and fill in the selection with any colour, then copy in your image and clip it to the screen layer. You can change the position of the image within the frame.



LENS TEST

EXPERT OPINION ON THE LATEST KIT

CANON RF 100-300MM F2.8L IS USM

Joins Canon's threesome of regular f/2.8 zooms

www.canon.co.uk £11,500 / $9,500

The Canon RF 100-300mm F2.8L IS USM is a telephoto addition to Canon's RF 15-35mm F2.8L IS USM, RF 24-70mm F2.8L IS USM and RF 70-200mm F2.8L IS USM 'trinity' zoom lenses, but is more like D'Artagnan to Canon's existing Three RF Musketeers. There hasn't been anything quite like this lens before, at least not from Canon. It's akin to the Canon EF 300mm f/2.8L IS USM prime but, with the added versatility of being a zoom that offers 'prime lens' performance, plus Canon L-series build quality.

Key features

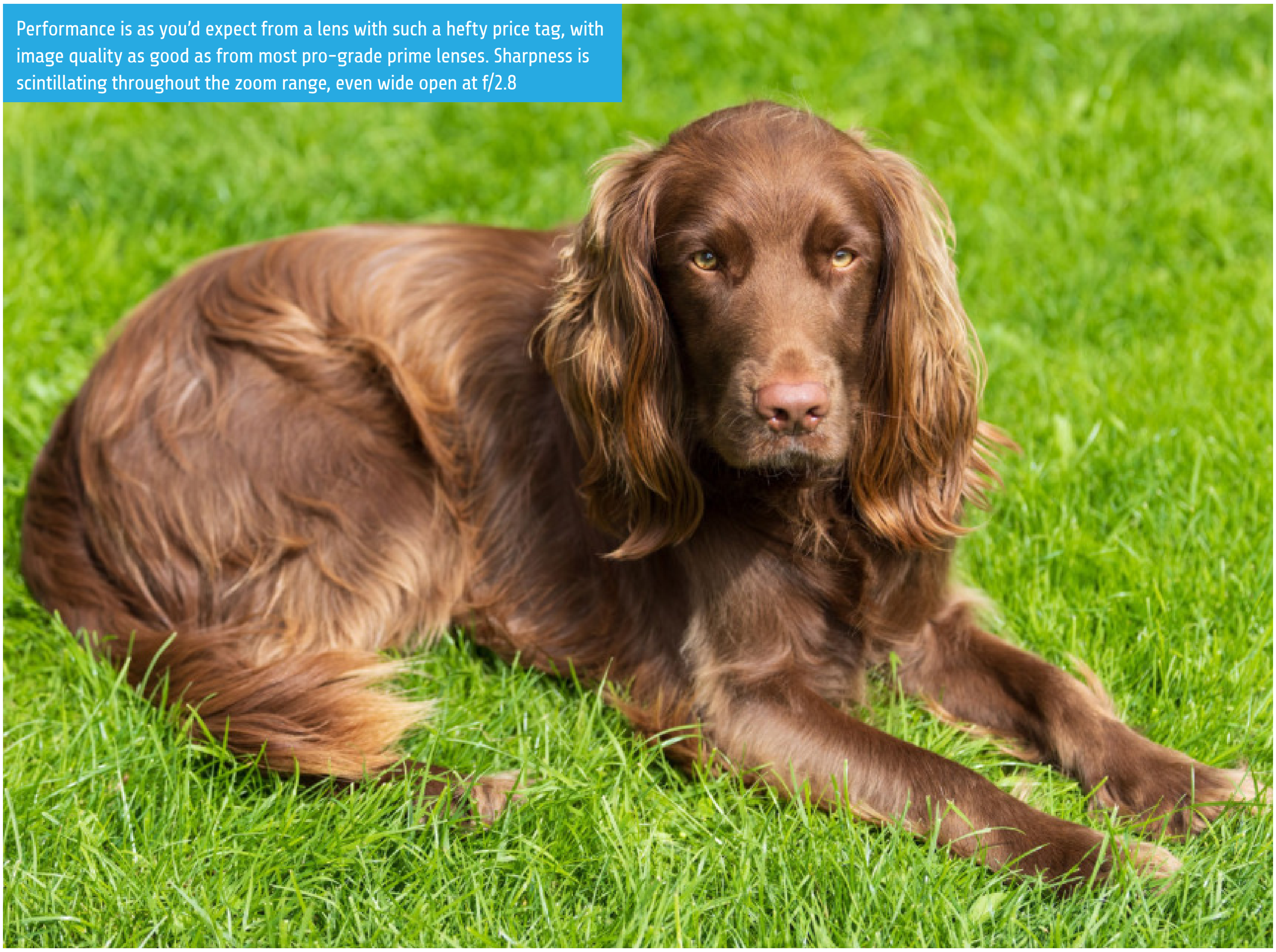
Standout features are the powerful 100-300mm telephoto zoom range and a fast and constant f/2.8 aperture, meaning a strong telephoto reach with the ability to freeze movement by maintaining fast shutter speeds under low lighting. This is a pro-grade lens with an exhaustive list of high-end features. Autofocus is courtesy of dual Nano USM motors driving two groups of focusing elements. There's a 5.5-stop optical image stabiliser, which is boosted to 6-stop if used with EOS R-system cameras' in-body

1 The lens features Canon's Super Spectra coating, which helps minimise ghosting and flare, along with the more high-tech ASC (Air-Sphere Coating).

2 Handling benefits from an array of switches, including four lens function buttons, an L-fn switch, autofocus range limiter and AF/MF focus mode switch.

3 As you'd expect from a lens weighing 2.5kg, the RF 100-300mm F2.8L comes with a tripod mounting ring, which has click steps at 45-degree increments.

LENS CANON RF 100-300MM F2.8L IS USM



Performance is as you'd expect from a lens with such a hefty price tag, with image quality as good as from most pro-grade prime lenses. Sharpness is scintillating throughout the zoom range, even wide open at f/2.8

stabilisation. The stabiliser has three switchable modes, for static and panning shots, plus an exposure-only mode for easier tracking of erratically moving objects.

The optical design includes 23 elements in 18 groups and boasts four Ultra-low Dispersion elements. Unusually for a telephoto, there's a glass moulded aspherical element and one fluorite element, designed to boost optical quality while reducing the overall weight of the lens.

Canon's Super Spectra coating helps minimise ghosting and flare, along with the more high-tech ASC (Air-Sphere Coating). As you'd expect from a lens weighing 2.5kg, it's supplied with a tripod mounting ring, which has click steps at 45-degree increments. Also supplied are a circular-profile hood, and a fitted soft case with a grab handle and adjustable shoulder strap. The lens is compatible with Canon's 1.4x and 2.0x RF teleconverters, boosting the zoom range to 140-420mm or 200-600mm, with a 1- or 2-stop narrowing of aperture width.

Build and handling

Build quality is everything you'd hope for in a premium lens with such a hefty price tag. The construction feels solid and includes an extensive set of weather seals, and a fluorine coating on the front element to repel moisture and fingermarks and aid cleaning.

Handling benefits from a plentiful array of switches and control rings. There are four customisable lens function buttons at the front, behind which sits a customisable control ring with click steps. There's an L-fn switch with preset and recall positions, which operates in conjunction with a lens function/focus preset button; you can use these to preset a focus distance setting and recall it with the press of a button. Below the L-fn switch is an autofocus range limiter switch, which locks out the short end of the range between 1.8m and 6m. The 1.8m minimum focus distance remains constant across the range, enabling a maximum magnification ratio of 0.16x at the longest 300mm focal length. There is an AF/MF focus mode switch, with full-time manual override available via the electronically coupled focus ring. At the rear, there's a stabiliser on/off switch and a three-position stabiliser mode switch.

Like many constant-aperture telephoto zooms, this lens has a fixed length, so there's no extending inner

LENS CANON RF 100-300MM F2.8L IS USM

Just as important as the image quality for many photographers is the bokeh, which in the case of this lens is smooth and dreamy. Wide apertures offer potential for a tight depth of field, especially at the long end of the zoom range

barrel as you stretch to longer zoom settings. That's a bonus if you're using a gimbal, as the lens retains the same centre of gravity at all focal lengths, and minimises the risk of taking in dust or moisture. Two strap lugs are fixed to the lens, to avoid straining the camera body's lens mount when you're carrying it around.

Performance

Image quality is easily as good as most pro-grade prime lenses. Sharpness is scintillating throughout the entire zoom range, even when shooting wide open at f/2.8. Equally importantly for many photographers, bokeh is smooth and dreamy, and the widest aperture gives plenty of potential for gaining a tight depth of field, especially at the long end of the zoom range.

Colour fringing can be noticeable towards the edges and corners of the frame in the short half of the zoom range, but eases off at longer settings. The same goes for the barrel and pincushion distortion, at the short and long ends of the zoom range. Resistance to ghosting and flare is also good, thanks to the dual Super Spectra and ASC coatings.

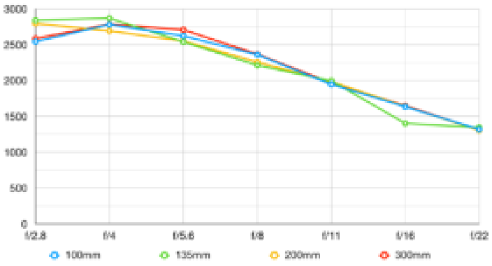
Using the lens with a Canon EOS R5, autofocus snapped into place when shooting stills, and was adept at tracking fast-moving subject matter. For video, it gives smooth transitions and is virtually silent in operation. The optical image stabiliser lives up to its 5.5-stop billing, with a slight boost to 6-stop effectiveness when used with most Canon EOS R-system cameras.

Matthew Richards

S P E C S

MOUNT: CANON RF **FULL-FRAME:** YES **LENS CONSTRUCTION:** 23 ELEMENTS IN 18 GROUPS **ANGLE OF VIEW:** 24-8.25º **AUTOFOCUS:** YES **IMAGE STABILISATION:** YES **DIAPHRAGM BLADES:** 9 **MAX APERTURE:** F/2.8 **MIN APERTURE:** F/22 **MIN FOCUS DISTANCE:** 108CM (ALL FOCAL LENGTHS) **MAX MAGNIFICATION RATIO:** 0.16X **FILTER SIZE:** 112MM **DIMENSIONS (L X D):** 323.4 X 128MM **WEIGHT:** 2,590G

SHARPNESS



This lens is supremely sharp. Better still, scintillating levels of sharpness are maintained throughout the entire zoom range, from the centre of the image frame right out to the extreme corners, even when you're shooting wide-open at f/2.8.

FRINGING 0.88

Colour fringing can be noticeable towards the edges of the image frame at the short end of the zoom range, becoming less as you extend towards 300mm. It's easily taken care of by in-camera correction.

DISTORTION 0.15

There's a slight hint of barrel distortion at 100mm, virtually no distortion at the 135mm mark, and minimal pincushion in the 200-300mm sector of the zoom range. It's almost unnoticeable in real-world shooting, even with automatic in-camera corrections disabled.

VERDICT

When a 70-200mm f/2.8 zoom doesn't cover the distance, this lens gives extended telephoto reach with no reduction in aperture, along with speedy autofocus and effective optical image stabilisation. It's ideal for action, sports and wildlife photography, as well as for portraiture. Image quality is superb, but this versatility and performance comes at a price, as well as a weight premium, with the lens weighing over 2.5kg.

★★★★½

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A P P S

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